



Utilization of Wild Relatives of Wheat in Developing Salinity Tolerant Winter Wheat with Improved Quality for Central Asia

Graduate Research Training Opportunities

Invitation

The International Center for Agricultural Research in Dry Areas (ICARDA) and University of Bonn would like to offer opportunities to conduct thesis research in ICARDA research project for their PhD degree. Eligible applicants will be enrolled in University of Bonn. They will have the opportunity to conduct all or part of their thesis research work in ICARDA research project under the joint supervision of the University of Bonn and ICARDA scientists.

In this brochure you will find information on the specific objectives for this program, its content and how to apply. The brochure can also be accessed from ICARDA's web site www.icarda.org



Program Objectives

The Utilization of Wild Relatives of Wheat in Developing Salinity Tolerant winter wheat with improved quality for Central Asia project intends to improve winter wheat germplasm for Central Asia with salinity tolerance and improved end-use (bread-making) quality, using reconstructed (also known as “synthetic”) hexaploid wheats (SHWs), to address problems of food security in the salinity-ridden irrigated lands of Central Asia. The overall goal is to improve salinity tolerance and end-use quality of wheat in Central Asia by delivering elite germplasm with improved end-use quality and salinity tolerance. To contribute to this goal, the project will train three PhD candidates in collaboration with the University of Bonn.

Graduate Research Themes

The topics that PhD students can choose from

Broad Areas for Writing Doctor of Philosophy (Ph.D.) Proposal

- **Characterization of salinity tolerance using a collection of hexaploid wheat landraces derived from FIG including winter wheat from diverse sources**
- **Genetic and physiological characterization of traits associated with salinity tolerance in synthetic backcross derived lines under field conditions**
- **Production of synthetic-derived wheat lines with improved salt tolerance and enhanced end-use quality.**
- **Development of molecular markers linked to traits conferring salinity and improved end-use quality in synthetic derived wheat lines**

Terms of the award

The graduate student receives financial support to cover direct costs for a maximum of **36** months. Awards include allowances for covering the costs of housing accommodation, a monthly stipend, health and accidental insurance, economy class round-trip air-ticket between home country and Germany, and research materials. However, the award does not cover dependent travel and any other costs incurred by the graduate student. ICARDA requires the student to submit regular progress reports and two copies of the completed thesis.

Academic Qualification:

The applicant for this Ph.D. degree must hold an M.S. degree from an accredited university in plant breeding or related field with previous course work completed in plant breeding, genetics and biometrics.

Application Process

Closing date September 15, 2010

Candidates applying for the graduate awards should submit the following documents along:

1. Letter of application (1 page), including a copy of the passport
2. Curriculum vitae
3. Application form with a recent passport photo

4. Two letters of recommendation from professors or supervisors
5. Copies of all relevant academic certificates obtained. Copies of certificates have to be officially authenticated. All certificates must be accompanied by an explanation of the grading system. Documents issued in languages other than German, English, French or Spanish must be accompanied by German or English translation.
Those in the final semester of their Masters study are also eligible to apply. In this case you may submit your degree certificate later. However, we will still need transcripts of your study or at least a written proof of your grades during the course of the Masters study.
6. Proposed research plan. It should be formulated in reference to the **core doctoral research themes of the Project**. The proposal should consist of about 2-3 pages. The purpose of the research proposal is to demonstrate the applicants' general ability to conceptualize a research project. It is usually adjusted or revised during the first year of the doctoral studies. The research proposal should contain justification for the study, objectives of the study and analytical framework, main hypotheses, methodology (including data sources), expected research output and policy relevance, bibliography, field research budget, and time schedule.
7. An abstract of your masters or diploma thesis.
8. Applicants should not exceed 35 years age
9. Certified proficiency in English. The University of Bonn requires TOEFL (550 points paper based; 213 computer based-; 79-80 iBT) or IELTS (band 6).

Selected candidates will be interviewed by the selection committee. Accepted candidates will be notified by the University of Bonn through email or fax. Once accepted, applicants must confirm participation. An invitation letter will be sent out, containing additional information on the program and practical arrangements.

Contact Information

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